**Kim Schroder**

THE WATER CYCLE  
**Subject:** Science  
**Grade Level:** 4  
**Time Allotment:** 45-minute class period  
  
In order for students to understand water and its importance, they must first understand the process by which it is produced. This lesson will help students discover how water is created in nature and the path it takes to reach our rivers, streams, and taps. Using the scientific method, students will conduct an experiment that simulates the water cycle.

**CCLS Standards: RS4.1:** Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

**Teacher Standards: Danielson 3C:** Engaging Students in Learning

**LEARNING OBJECTIVES**: Students will be able to:

* Define and explain the water cycle
* Conduct an experiment using the scientific method
* Record and interpret observations
* Draw accurate conclusions based on scientific evidence

**MATERIALS**

* Chart paper
* Science journals
* Internet access computers (one with projector)
* For model: (for each group)
  + One glass jar with lid, soil, sand, pebbles or small rocks, plant, water, masking tape and marker for labeling jar

**Aim: What is the water cycle?**  
  
**Do Now:**  Write the word "cycle" on the board. Students write responses to the following questions in their science journals:

* What images are suggested by the world "cycle"?
* What shapes best represent cycles?
* Have you ever heard of the water cycle? What do you know about it?

Students share out their responses and create a KWL chart on the water cycle on the board or chart paper.  
  
**Mini Lesson:** In this activity, students will view a presentation about the water cycle, [The Water Cycle](http://www.epa.gov/safewater/kids/flash/flash_watercycle.html). While viewing the presentation, students take notes using guided questions like the following:

* When and why does it precipitation occur?
* Where does the rainwater go once it reaches ground?
* How do many people acquire drinking water?
* How does the sun affect water?
* What happens to the vapor in the air when it gets cold?

Teacher will demonstrate activity by creating a model of the water cycle.

**Group Activity:** In this activity, students will build a model of the water cycle.

1. Fill the jar with small rocks first and then add the sand.
2. Add the plant.
3. Fill a small cup with water and place it in the jar.
4. Put the lid securely on the jar.
5. Place the model in a sunny windowsill and observe.

**Independent Work**: Have student predict in their science journals what will happen to their model as it warms on a sunny windowsill. (Day one)  
  
Have groups watch and record in their science journals what happens to their model as it warms on a sunny windowsill. (Day one, two, and three)  
  
**Share**: Share predictions

**Assessment:** In their science notebooks, students will create a flow chart demonstrating the water cycle.